

Having thus set forth the preferred embodiments, the invention is now claimed to be:

1. A method of xerographic digital imaging where an LED bar selectively exposes an area of a photoreceptor in response to an input, the method comprising:
receiving a plurality of pixels, representing an input pixel; and
varying an exposure on the photoreceptor of a selected pixel based on
5 surrounding pixels, the selected pixel exposing an area on the photoreceptor different than other pixels.
2. The method of imaging as set forth in claim 1, further comprising parsing the plurality of input pixels for a determined image characteristic.
3. The method of imaging as set forth in claim 2, where the parsing comprises template matching the plurality of image pixels.
4. The method of imaging as set forth in claim 2, where a set of the image pixels are exposed at a reference level, the varying step comprising:
based on the parsing, selecting a pixel comprising the determined
image characteristic for varied exposure; and
5 variably exposing the selected pixel relative to the reference level.
5. The method of imaging as set forth in claim 1, the varying step comprising:
delaying exposing of the photoreceptor for the selected pixel.
6. The method of imaging as set forth in claim 1, the varying step comprising:
ceasing exposing the photoreceptor for the selected pixel prior to other
pixels.

7. The method of imaging as set forth in claim 1, where the varying step comprises altering the exposure of the photoreceptor for selected pixels comprising identifiable image structures.

8. An xerographic printing apparatus comprising:
an input which receives digital pixels representing an input image;
a processor which processes the pixel and directs signals to an LED bar which selectively exposes areas of a photoreceptor to produce a latent image, the
5 processor controlling exposure of the photoreceptor by variably exposing a selected pixel based on surrounding pixels; and,
an image output which converts the latent image on the photoreceptor to an image on an output media.

9. The imaging apparatus as set forth in claim 8, where the processor comprises:
an image structure parser which examines the pixels to determine an image structure beneficially adaptable to varied exposure;
5 an image pixel selector which analyzes pixels comprising the determined image structure and selects a pixel for varied exposure; and,
an exposure calculator which determines a variable exposure relative to a reference for at least the selected pixel.

10. A method of digital imaging where a digital image is processed and output on a printing device including an image bar disposed across a charge retentive surface, the method comprising:
parsing an input data sequence representative of the digital image until
5 a determined condition is encountered; and
assigning a varied exposure value to a datum in the input sequence based on adjacency to the determined condition.

11. The method of digital imaging as set forth in claim 10, the method further comprising:

converting the assigned varied exposure value to an associated electrostatic exposure on the charge retentive surface.

12. The method of printing a digital image as set forth in claim 11, where the determined condition includes a boundary offset in a process direction, the assigning comprising:

5 assigning a value representative of increased electrostatic exposure relative to a reference value to a first datum in the input sequence at a position in the boundary.

13. The method of printing a digital image as set forth in claim 12, further comprising:

5 assigning a value representative of decreased electrostatic exposure relative to a reference value to a datum in the input sequence adjacent to the first datum.

14. The method of printing a digital image as set forth in claim 11, where the determined condition includes a corner, the assigning comprising:

5 assigning a value representative of altered electrostatic exposure timing relative to a reference to a datum in the input sequence, the datum being at a determined position in the corner.

15. The method of printing a digital image as set forth in claim 12, where the converting comprises:

5 illuminating a portion of the charge retentive surface with:
a first spot size for data assigned with the reference value, and
a second spot size smaller than the first spot size for data assigned with the varied exposure value.